

## **REMARKS**

Reconsideration and allowance are respectfully requested. Claims 1 – 16 are pending.

### **Finality of Office Action**

Applicants request that the Examiner withdraw the finality of the outstanding office action and consider the discussion herein. The Primary reason for this request is that the appropriateness of a final office action should include a review of all outstanding grounds of rejection and any such grounds relied on in the final rejection should be reiterated. Notably, the Examiner's answer should contain a complete statement of the examiner's position. The arguments "must also be clearly developed to such an extent that applicant may readily judge the advisability of an appeal." MPEP 706.07. Applicants request withdrawal of the finality of the office action because the final office action does not qualify under the required reasons for going final. In the Final Office Action response to arguments, the Examiner has done the following:

- (1) In response to Applicants arguments that Reynar et al. teach away from the present invention by focusing on correcting speech recognition *mode* errors, the Examiner has merely stated that "Reynar et al. encompasses applicant's invention. Therefore, applicant's arguments are not persuasive." The Examiner on page 2 of the Final Office failed to reiterate correctly that Applicants arguments are that Reynar et al. focus on mode errors – instead the Examiner characterized Applicants argument as merely "correcting speech recognition errors. There is a difference and it is apparent to Applicants that the Examiner may be interpreting Reynar et al. as teaching a "correction of speech recognition errors" instead of speech recognition *mode* errors. In any event, there was no substance to the Examiner's response other than the reassertion that Reynar et al. teach the invention. In this regard, the Examiner's arguments did not address Applicants specific arguments and were so general that they have not been "clearly developed to such an extent that applicant may readily judge the advisability of an appeal."

(2) In response to Applicants arguments about the insufficient motivation to combine the references, the Examiner has merely stated that the Examiner had previously cited a column and paragraph and that sufficient evidence had therefore been cited. This avoids any analysis for a motivation to combine. The legal standard is not whether a paragraph in a reference can be cited but whether the teachings of the reference as a whole have sufficient suggestive power or motivation to combine with another reference. Therefore, Applicants are unsure of the Examiner's position regarding the evidence of the lack of motivation to combine presented in our previous response.

(3) On pages 9 – 10 of the previous response, Applicants argued that Reynar et al. fail to teach anything regarding the last step of claim 1 which requires applying at least one language model to the single concatenated lattice in order to determine relationships between the plurality of lattices. Applicants pointed out that there is simply no discussion in Reynar et al. of any analysis of determining a relationship between a plurality of lattices. The Examiner did not mention any response to this argument but merely cited again on page 5 of the office action that this is taught in column 8.

Accordingly, Applicants request consideration of the arguments below in a withdrawal of the finality of the office action.

#### **Rejection of Claims 1, 8 and 13 – 14 Under Section 102**

The Examiner rejects claims 1, 8 and 13-14 under Section 102 as being anticipated by Reynar et al. (USP 6,581,033) (“Reynar et al.”). Applicants will focus in this response on the teachings of Reynar et al. and why they do not anticipate claims 1, 8 and 13 – 14. Applicants' previous arguments in response to the non-final office action will be further developed and a response to the Examiner's arguments in the Final Office Action will also be provided.

It is apparent that the Examiner has not fully considered Applicants arguments regarding the teachings of Reynar et al. In response to Applicants arguments that Reynar et

al. teach away from the present invention by focusing on correcting speech recognition *mode* errors, the Examiner has merely stated that “Reynar et al. encompasses applicant’s invention. Therefore, applicant’s arguments are not persuasive.” As noted above, the Examiner does not address the difference between correcting speech recognition errors and correcting speech recognition *mode* errors taught by Reynar et al. A mode correction processor is discussed in column 3, lines 51 – 58:

A mode correction processor detects when a speech recognition mode error has been made. Typically, the user can send a command from the program to indicate that a speech recognition mode error has been made. When the mode correction processor receives a command indicating a speech recognition mode error, the mode correction processor initiates a correction routine corresponding to the type of speech recognition mode error.

Following this section through column 4, line 35 are descriptions of examples of how the system provides for mode corrections. In none of these cases is there a description of how to process speech recognition errors, i.e., where the speech has been transcribed into the wrong words via an error in recognition.

Now, the Examiner has cited column 8, lines 25 – 31 (page 2 of the FOA) as teaching receiving results “for input or entry to the document.” This portion of Reynar et al. teaches:

After speech recognition mode results are returned by the dictation processor 214 and/or the command processor 212, the mode correction processor 216 receives the results and calls the results to the application program 138 for input or entry into the document. The mode correction processor 216 can also store the results in a memory device such as RAM 206 for later retrieval.

The “for input or entry into the document” relates to the speech utterance being used either as a command or for entry into a document. The question here is whether teaching that speech recognition results are to be entered into a document as is taught by Reynar et al. is the same as the claimed limitation of receiving speech utterances “associated with a plurality of data fields.” Applicants submit that these are different technical features and thus the claimed limitation is not taught by Reynar et al.

Notably, in each case where an application receives speech utterance input in Reynar et al., they annotate the application as a “word processor.” FIG. 1, feature 138, FIG. 2, feature 138, FIG. 4, feature 412, FIG. 5, feature 510, FIG. 7, feature 712, FIG. 8, feature 812. Reynar et al. teach that “when a user reads a document aloud or dictates to a speech recognition program, the program can enter the user’s spoken words directly into a word processing program operating on a personal computer.” Col. 1, lines 53 – 57. In column 2, Reynar et al. teach that the application program is Microsoft Word. Col. 2, lines 20-21. In sum, in the background of the invention section of Reynar et al, it is clear that the application taught for use with the speech recognition and *mode* recognition and correction invention is a word processing application like Microsoft Word. Applicants respectfully submit that when dictating speech for recognition and input to a word processor there are no “plurality of data fields” as is recited in claim 1.

A non-limiting and simple example would be where a user is inputting information about his or her name and address on a website. In that situation, there are data fields for name, address, phone number, email address, etc. Such data field delineations are not found in a word processor where the user can simply add any text without restriction or expectation that the entered data will conform to any predetermined type of data such as name or address. Therefore, Applicants submit that this feature of claim 1 related to the utterances being associated with a plurality of data fields is not taught by Reynar et al.

Because this underlying feature of the plurality of lattices being related to speech utterances associated with a plurality of data fields is not taught by Reynar et al., then the next limitation of concatenating the plurality of utterances is also not taught by Reynar et al. The Examiner equates column 8, lines 32 – 54 with this claim limitation. However, column 8 teaches that “lattices representing adjacent pieces of text can be combined into a larger lattice through a process known as concatenation. The larger lattice can then be traversed to produce alternatives for the adjacent pieces of text.” Applicants reiterate that this does not

teach taking a plurality of lattices for speech utterances associated with filing a plurality of data fields and concatenating that plurality of lattices into a single lattice. Where Reynar et al. teach inputting text into a word processor, it is clear that in the context of concatenation, Reynar et al. simply teaches concatenating lattices from adjacent pieces of text within the word processor into a larger lattice. This differs from the claimed limitation because there is no reference to or teaching regarding a plurality of data fields as discussed above.

Finally, the last limitation of claim 1 is not mentioned or discussed and the Examiner avoided addressing it in the final office action. The Examiner cites column 8, lines 1 – 17 and 33 – 54 as teaching applying at least one language model to the single concatenated lattice in order to determine a relationship between the plurality of lattices. These portions of Reynar et al. are provided here:

When the speech input 204 is received by the dictation processor 214, the dictation processor 214 processes the speech input 204 as dictation to be input into the application program 138. Using a natural language model 218, such as a statistical language model (SLM), the dictation processor 214 returns a text string for the given speech input 204. Other language models can be used to process the speech input 204 to return a text string for use in the application program 138.

When the speech input 204 is received by the command processor 212, the command processor 212 processes the speech input 204 as a command to be input into the application program 138. Using a context-free grammar (CFG) language model 220, the command processor 212 returns a command for the given speech input 204. Other language models can be used to process the speech input 204 to return a command for use in an application program 138. (col. 8, lines 1 – 17)

A memory device such as RAM 206 is useful to store speech input 204 or processed speech input 204. The RAM 206 can comprise a data structure capable of storing speech input 204 data such as a stochastic model. Two useful structures for doing so are a lattice and an "n-best" alternatives list. A lattice is a structure that is well known to those skilled in the art, so a complete description will not be given. Briefly, however, a lattice stores words or phrases produced by a speech input source in nodes. Because each word or phrase is speech input data, the node also stores a probability assigned to the associated word or phrase. Using methods well known to those skilled in the art, the lattice can be traversed in order to produce likely alternatives for any section of text represented by the speech input data. Furthermore, lattices representing adjacent pieces of text can be combined into a larger lattice through a process known as concatenation. The larger lattice can then be traversed to produce alternatives for the adjacent pieces of text. Alternatively, speech input data may be represented by a list of the n-best alternatives and their associated probabilities. For any given word or phrase, an n-best alternatives list may be produced from a lattice representing the word or phrase. (col. 8, lines 33 – 54)

The best these teachings can do is that the “larger lattice” is traversed to produce alternatives for the adjacent pieces of text. The claim limitation requires that a language model is applied to the single concatenated lattice in order to determine relationships between the plurality of lattices. Applicants simply submit that there is no teaching or suggestion about the generation of the recited concatenated lattice and further no teaching here regarding applying the language model to determine relationships between the plurality of lattices. Accordingly, Applicants respectfully submit that claim 1 as well as claims 8 and 14 are patentable and in condition for allowance. Claim 13 is allowable as dependent on claim 8.

### **Rejection of Claims 2, 6-7, 9, 11 and 16 Under Section 103**

The Examiner rejects claims 2, 6-7, 9, 11 and 16 under Section 103(a) as being unpatentable over Reynar in view of Thrasher et al. (U.S. Pub. No. 2002/0052742) (“Thrasher”). Applicants incorporate the above arguments and submit that (1) because the parent claim is patentable and (2) because there is insufficient motivation to combine Reynar et al. with Thrasher et al, that these two claims are patentable and in condition for allowance. Applicants note here that in the Examiner’s response to Applicants arguments about the insufficient motivation to combine the references, the Examiner has merely stated that the Examiner had previously cited a column and paragraph and that sufficient evidence had therefore been cited. Applicants respectfully submit that this avoids any analysis for a motivation to combine. The legal standard is not whether a paragraph in a reference can be cited but whether the teachings of the reference as a whole have sufficient suggestive power or motivation to combine with another reference. A simple example will show the point. Assume a patent issues for a bicycle with its title, Abstract, introduction, and everything about the application focused on a bicycle invention. If buried in paragraph 100 of the patent is a reference to speech recognition that could be cited by the Examiner, would it be obvious to combine the references? Given the overall teachings of the reference would one of skill in

the speech recognition art see the title, Abstract and overall thrust of the bicycle patent and have any kind of motivation to look further to find paragraph 100? Clearly the answer is no. However, under the Examiner's reasoning, all that is needed is the citation to the paragraph in the reference with the material. Applicants reiterate their previous arguments and submit that the Examiner has yet to rebut Applicants arguments and provide a complete analysis as to why one of skill in the art would find motivation or a suggestion to combine these references.

Applicants do not that given the analysis above, that Reynar et al. fails to teach the features discussed and that for this reason as well, these claims are patentable given that their parent claims are patentable.

### **Rejection of Claim 3 and 4 Under Section 103**

The Examiner rejects claim 3 and 4 under section 103(a) as being unpatentable over Reynar et al. in view of Thrasher, as applied to claim 2, in further view of Waibel et al. (USP 5,712,957) ("Waibel"). Applicants submit that since the parent claims are patentable over Reynar et al. as discussed above, that claims 3 and 4 are patentable.

### **Rejection of claim 5 under 35 U.S.C. 103**

The Examiner has rejected claim 5 under 35 U.S.C. Section 103(a) as being unpatentable over Reynar et al., in view of Morin et al. (USP 6,411,927) ("Morin").

Applicants submit that given the discussed above about the numerous limitations in parent claim 1 that are not taught by Reynar et al. that claim 5 is patentable.

Claim 5 alternatively is rejected under 35 U.S.C. Section 103(a) as being unpatentable over Reynar et al. in view of Flanagan et al. (USP 5,737,485) ("Flanagan"). Applicants submit that given the discussed above about the numerous limitations in parent claim 1 that are not taught by Reynar et al. that claim 5 is patentable.

Claim 5 is rejected under 35 U.S.C. Section 103(a) as being unpatentable over Reynar et al. in view of L'Esperance et al. (U.S. Pub. No. 2002/0055844) ("L'Esperance").

Applicants also submit that given the discussed above about the numerous limitations in parent claim 1 that are not taught by Reynar et al. that claim 5 is patentable.

**Rejection of claim 10 under 35 U.S.C. 103(a)**

The Examiner has rejected claim 10 under 35 U.S.C. Section 103(a) as being unpatentable over Reynar et al. in view of Pan et al. (USP 6,304,844) (“Pan”). Applicants submit that given the discussed above about the numerous limitations in parent claim 8 that are not taught by Reynar et al. that claim 5 is patentable.

**Rejection of claim 15 under 35 U.S.C. 103**

The Examiner has rejected claim 15 under 35 U.S.C. Section 103(a) as being unpatentable over Reynar et al. in view of Waibel. Applicants submit that given the discussed above about the numerous limitations in parent claim 1 that are not taught by Reynar et al. that claim 5 is patentable.

Applicants also note that they do not concede that any of the section 103 rejections are appropriate above but assert that given the arguments that Reynar et al. simply do not teach the parent claim limitations as has been asserted by the Examiner, that detailed section 103 arguments are not necessary at this time.

**CONCLUSION**

Having addressed the rejection of claims 1 - 16, Applicants respectfully submit that the subject application is in condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,

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